Appl. No. 10/081,061   <u>PATENT</u>
Amdt. Sent October 12, 2006
Amendment under 37 CFR 1.116 Expedited Procedure
Examining Group 2134

<u>Amendments to the Claims:</u>

This listing of claims will replace all prior versions, and listings, of claims in the application:

<u>Listing of Claims:</u>

1-19.   (Canceled)

1   20.   (Currently amended) A computer system having an input/output

2 processing unit for executing a file access, an access execution unit for requesting a file access

3 via the input/output processing unit in response to a user instruction, and an access control unit

4 for performing access control when the file access is executed, wherein the access control unit

5 comprises:

6   a storage unit protected from the access execution unit;

7   a file list stored in the storage unit describing security levels of files;

8   a user list stored in the storage unit describing clearances of users;

9   an access control processing unit for determining whether the file access is legal

10 in accordance with the file list, the user list, an access type of the file access, information

11 identifying a file, and information identifying a user, <u>wherein if a host OS program of the access</u>

12 <u>control processing unit is tampered with, a guest OS of the access control processing unit is</u>

13 <u>instructed to invalidate one or more functions of the host OS program;</u>

14   an enciphering unit for encrypting a file when storing the file on a storage

15 medium;

16   a deciphering unit for decrypting the encrypted file when retrieving the encrypted

17 file from the storage medium; wherein the storage unit stores <u>at least one cipher key commonly</u>

18 <u>used among a plurality of security levels for each file</u>at least one key created independently of

19 the user, which <u>the encipher key</u> is used for both encrypting and decrypting; and

20   an access monitor unit which:

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21 when the input/output processing unit executes a file access, sends the

22 access type, the information identifying the file, and the information identifying the user

23 to the access control processing unit;

24 receives a validity determination result of the file access from the access

25 control processing unit; and

26 if the file access is legal, causes the input/output processing unit to execute

27 the file access, and if the file access is illegal, inhibits the file access.

1 21. (Previously presented) A system as in claim 20 further comprising an

2 exclusive control unit for protecting, from the access execution unit, a storage area of the storage

3 unit to be used by the access control processing unit.

1 22. (Previously presented) A system as in claim 21 further comprising a user

2 list setting/managing unit for setting and managing the user list.

1 23. (Previously presented) A system as in claim 22 wherein the user list

2 setting/managing unit includes an authentication unit for authenticating a security administrator.

1 24. (Previously presented) A system as in claim 23 wherein the security

2 administrator is different from a system administrator who manages the access execution unit.

1 25. (Previously presented) A system as in claim 20 further comprising a file

2 list setting/managing unit for setting and managing the file list.

1 26. (Previously presented) A system as in claim 25 wherein the file list

2 setting/managing unit includes an authentication unit for authenticating a security administrator.

1 27. (Previously presented) A system as in claim 26 wherein the security

2 administrator is different from a system administrator who manages the access execution unit.

1 28. (Previously presented) A system as in claim 20 further comprising:

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2   an enciphering unit for encrypting a file if the file access requesting to output a

3   file to the storage unit is legal; and

4   a deciphering unit for decrypting the enciphered file if the file access for

5   requesting to input the enciphered file from the storage unit is legal.

1   29.   (Previously presented) A system as in claim 28 wherein an exclusive

2   control unit protects from the access execution unit a storage area in the storage unit storing at

3   least one key information set to be used by the enciphering unit and the deciphering unit.

1   30.   (Previously presented) A system as in claim 20 wherein the enciphering

2   unit and the deciphering unit use a plurality set of different key information and at least one

3   cipher method for each security level written in the file list.

1   31.   (Previously presented) A system as in claim 20 further comprising an

2   input/output monitor unit for monitoring that the input/output processing unit or the access

3   monitor unit is not tampered or performs a predetermined operation, and instructing to inhibit an

4   input/output of a file if the input/output processing unit or the access monitor unit is tampered or

5   performs an operation different from the predetermined operation.

1   32.   (Previously presented) A system as in claim 20 further comprising a file

2   access log processing unit for storing and managing information on each file access sent to the

3   access control processing unit.

1   33.   (Previously presented) A system as in claim 20 wherein the access control

2   unit is realized by a software module.

1   34.   (Previously presented) A system as in claim 20 wherein the access control

2   unit is realized by a hardware module.

1   35.   (Previously presented) A system as in claim 20 wherein the key

2   comprises a symmetric key.

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